	Application No.	Applicant(s)
Notice of Allowability	09/885,632	ELVING, CHRISTOPHER H.
	Examiner	Art Unit	
	Li B. Zhen	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *arguments submitted 04/03/2006*.

2. ☒ The allowed claim(s) is/are *1-4,7,10-13 and 36-45, renumbered as claims 1-19*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 02/04/2005

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

REASONS FOR ALLOWANCE

1.   The following is an examiner's statement of reasons for allowance:

The prior art of record does not expressly teach or render obvious the invention as recited in independent claims 1, 36 and 45.

The prior art [Drews] teaches a computer system for buffering data [col. 2, lines 60 – col. 3, line 14] in a multithreaded environment [col. 6, lines 20 – 31], reading a buffer index value that identifies a data buffer for buffering data [col. 3, lines 20 – 39], incrementing the buffer index value, locating a buffer array entry that is associated with the buffer index value [col. 3, lines 20 – 39], determining whether the buffer array entry indicates a particular value [col. 3, lines 39 – 53], if the buffer array entry does not indicate the particular value, then in response to a determination that the buffer array entry does not indicate the particular value [col. 3, lines 54 – col. 4, line 12], attempting to obtain a lock on a particular data buffer that is associated with the buffer array entry [col. 5, lines 16 – 44]. However, Drews does not teach reading a buffer index value that identifies a data buffer that was last used for buffering data and if the buffer array entry indicates the particular value at the particular time then, in response to a determination at the particular time that the buffer array entry indicates the particular value, incrementing the buffer index value without attempting to obtain a lock on the particular data buffer. The "next ready" marker of Drews doesn't identify a data buffer that was last used for buffering data because Drews' Fig. 4 reveals that the "next-ready" marker is pointing to a "full" slot 410, while slot 414 is being used to buffer data. Since slot 414 is being used more recently to buffer data than slot 410, to which the "next-ready"

marker refers, the "next-ready" marker doesn't identify the data buffer that was last used

for buffering data [see applicant's arguments in the pre-appeal conference request

submitted 04/03/2006]. Drews also discloses that a producer has to obtain a lock

(setting mutual exclusion token to true) to become the "producer-completer" and only

the "producer-completer" is allowed to increment the "next-read" marker (Drews, col. 5,

lines 2-9). The producer has to obtain a lock to become "producer-completer" in order

to increment the "next-ready" marker [see applicant's arguments in the pre-appeal

conference request submitted 04/03/2006]. Therefore, Drews does not disclose

incrementing the buffer index value without attempting to obtain a lock on the particular

data buffer.

Drews' system requires obtaining a lock before incrementing a buffer index to

prevent multiple produces from incrementing a buffer index at the same time. Modifying

Drews' system to increment a buffer index without obtaining a lock would allow multiple

producers to increment the buffer index at the same time and create inconsistent data.

Therefore, the prior art of record does not provide a basis of evidence for asserting a

motivation that one of ordinary skill level in the art at the time the invention was made

would have integrated or modified the computer system for buffering data to incorporate

the features of reading a buffer index value that identifies a data buffer that was last

used for buffering data and if the buffer array entry indicates the particular value at the

particular time then, in response to a determination at the particular time that the buffer

array entry indicates the particular value, incrementing the buffer index value without

attempting to obtain a lock on the particular data buffer as recited in the context of independent claims 1, 36 and 45.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONTACT INFORMATION

2.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
Art Unit 2194

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

LBZ